AMENDMENTS TO THE CLAIMS

Claims 1-10. (Cancelled)

Claim 11. (Currently Amended)

A display device for displaying an image according to input image data that is digital data, said display device comprising:

a light source for producing light;

light-transmitting filters for separating the light from said light source into at least four kinds of light including white light, said light-transmitting filters including a white-transmitting filter for transmitting white light and non-white transmitting filters;

a light valve for projecting each kind of light from said light-transmitting filters onto a screen;

said white light-transmitting filter being used to display information corresponding to lower-order bits of said digital data;

a signal converter portion to control said white light-transmitting filter using a control signal corresponding to said lower-order bits~~;~~, said signal converter portion including input terminals for receiving non-white light signals and a brightness signal calculating unit for calculating the brightness of the non-white light signals;

said non-white light-transmitting filters being used to display information corresponding to said higher-order bits of said digital data;

a drive device directly coupled to said signal converter portion for creating control signals for controlling the light transmitting filters and light valve; and

an integrated value of a transmissivity in a visible range of said white-transmitting filter is smaller than the combined integrated values of transmissivities in a visible range of said non-white transmitting filters;

wherein brightness created by a first gray level represented via said white light-transmitting filter is $1/2^m$ (m is the number of lower-order bits) the brightness created by a first gray level represented via said non-white light-transmitting filters.

Claim 12. (Previously Presented)

The display device of claim 11, wherein said white light-transmitting filter has spectral characteristics that are almost flat in the visible range of wavelengths of the light.

Claim 13. (Previously Presented)

The display device of claim 11, wherein if a brightness required by the input image data is lower than a given gray level, information is displayed using said white light-transmitting filter or said non-white light-transmitting filters, and if said brightness is higher than said given gray level, information is displayed using only said non-white light-transmitting filters.

Claim 14. (Previously Presented)

The display device of claim 11, wherein said light valve is of the reflective type.

Claim 15. (Previously Presented)

The display device of claim 11, wherein said light valve is of the transmissive type.

Claim 16. (Previously Presented)

The display device of claim 11, wherein a value obtained by integrating the product of spectral transmission factor of said white light-transmitting filter in the visible range and spectral luminous efficiency with respect to wavelength is less than sum of values obtained by integrating the product of spectral transmission factor of each of said non-white light-transmitting filters in the visible range and spectral luminous efficiency with respect to wavelength.

Claim 17. (Canceled)

Claim 18. (Currently Amended)

A method for displaying digital image data from a display device, comprising:

decomposing light from a light source into a plurality of colors, one of said plurality of colors being white;

controlling a white-light transmitting filter of a set of filters with a control signal corresponding to lower-order bits of said digital image data generated by a signal converter portion, wherein said signal converter portion includes input terminals for receiving non-white light signals and a brightness signal calculating unit for calculating the brightness of the non-white light signals;

controlling, by a drive device directly coupled to said signal converter portion, the light transmitting filters and a light valve used to project light from the set of filters;

displaying information corresponding to said lower-order bits using said white-light transmitting filters; and

projecting said plurality of colors from said set of filters;

wherein an integrated value of a transmissivity in a visible range of said white-light transmitting filter is smaller than the combined integrated values of transmissivities in a visible range of the other filters in said set of filters;

wherein brightness created by a first gray level represented via said white light-transmitting filter is $1/2^m$ (m is the number of lower-order bits) the brightness created by a first gray level represented via said non-white light-transmitting filters.

Claim 19. (Previously Presented)

The method of claim 18, further comprising displaying information corresponding to higher-order bits of said digital image data.

Claim 20. (Previously Presented)

The method of claim 19, further comprising controlling non-white transmitting filters of said set of filters with another control signal corresponding to said higher-order bits of said digital image.

Claim 21. (Previously Presented)

The display device of claim 11, wherein said signal converter portion controls said non-white light-transmitting filters using another control signal corresponding to said higher-order bits.

Claim 22. (Cancelled)

Claim 23. (Cancelled)